

REMARKS

The non-elected claims have been cancelled without prejudice to the remaining claims and the filing of a divisional application directed to the subject matter of the non-elected claims.

The Rejection

The elected claims 23, 25, 26 and 28-36 were rejected only under §103 as being unpatentable over Duhaime '470 in view of Arnold '094.

Reconsideration and withdrawal of this rejection is requested in view of the foregoing amendments and the following comments.

Claims 23, 25, 26, and 28-31 are Patentable

Applicant respectfully disagrees with the interpretation of the Duhaime reference set forth in the Final Office Action and submits that it is wrong. Contrary to the contention in the Final Office Action, Duhaime does not disclose the claimed invention except for the cap being simultaneously compression molded and Duhaime does not disclose that the cap "may be manufactured simultaneously with the container".

Rather, Duhaime discloses blow molding a multi-layer fuel tank 12 with a protrusion 26 which is pierced by a blow pin 28. After blow molding is completed, the tank is removed from the dies 14, 16 and a portion 34 is severed by knives 32 from the protrusion to form an open nipple 36. "End 34 is removed and discarded" (Emphasis added) [Col 6, Lines 49-50].

A separate closure 42 is separately manufactured and then welded and fused to the nipple 36 or open end of the protrusion 26. The closure 42 is separately manufactured and has three layers 44, 46, and 48 which “may be manufactured by simultaneous injection molding or may be fabricated in separate components and assembled together through welding or bonding” (Col 3, Lines 12-15). It is only these layers of the plug 42 which are simultaneously injection molded (as is conventional in the prior art) not the plug being simultaneously formed with and is part of the blow molding of the fuel tank as contended in the Office Action. There is absolutely nothing in the Duhaime reference which indicates the plug 42 is formed simultaneously with the blow molded fuel tank 12. Furthermore, in view of the knowledge of skilled persons of both the prior art and the explicit disclosure that the plug 42 is manufactured by “injection molding” or “fabricated in separate components assembled together through welding or bonding” Duhaime would be interpreted and understood by skilled persons as forming the plug separately from and by different methods and approaches than blow molding the fuel tank 12. Injection molding and laminating are completely different methods and use different equipment than blow molding.

If the Examiner disagrees with this interpretation of the Duhaime reference, it is respectfully requested that the Examiner identify by column and line the portions of the Duhaime reference on which the Examiner explicitly relies for the interpretation of the Duhaime reference set forth in the Final Office Action. This will facilitate evaluation of the Examiner’s interpretation of the reference for the purpose of pursuing any necessary appeal.

Arnold merely discloses a container 10 for shampoo with a blow molded body 12 with a compression molded integral closure flap 14 attached with living hinges 34 and 50 to the body. Both the body 12, flap 24 and living hinges 34, 50 are made with a single layer of plastic material which does not have any fuel and vapor barrier protection, the closures are never separated from the container and the closures are not welded or permanently attached and sealed to the container.

In view of the limited disclosure of Duhaime, the proposed combination of Duhaime and Arnold does not suggest or teach to skilled persons either the basic concept or the method steps defined by claim 23 nor the significant practical advantages of this claimed method, all of which are part of the subject matter as a whole which must be considered in determining the patentability under §103 of claim 23. Whether considered alone or in combination, Duhaime and Arnold do not teach or make obvious to persons of ordinary skill applicant's steps of method claim 23 of providing a mold having both a first cavity to blow mold a container and an adjacent second cavity to compression mold at least one cap in a flash section, providing a parison of a vapor barrier layer between inner and outer layers of a different heat weldable polymeric material, closing the mold halves to receive and compress a portion of the parison between them, forming a flash section in the region of the second cavity and at least one cap in the second cavity in the flash section, providing a pressurized fluid into the parison to form the entire container in the first mold cavity, forming an opening through the container, separating the cap from the flash section, disposing the cap over the opening, and heat welding the cap to the container to permanently attach and seal the cap to the container and permanently close and seal and provide a vapor barrier for the opening.

The proposed combination of Duhaime and Arnold teaches away from this claimed method by suggesting to skilled persons two distinctly different approaches of (1) separately forming a cap by injection molding or fabrication by lamination and subsequently welding the separately formed cap to the fuel tank after blow molding the tank, or (2) forming a closure flap of a single layer of material attached to the container by a living hinge to provide a releasable closure which can be used to repeatedly open and close openings in the container. Furthermore, due to the significantly different purposes and function of shampoo and similar containers, Arnold is non-analogous art which would not be considered by persons of ordinary skill in the manufacture of plastic fuel tanks with vapor barriers which are necessary to meet environmental pollution standards mandated by the United States Government.

There is no motivation, suggestion or teaching to skilled persons as to which of the numerous elements of these references should be discarded and which selected, re-arranged and recombined with elements not disclosed in these references to achieve applicant's specific and detailed method and its significant practical advantages all of which are part of the subject matter as a whole which must be considered in determining patentability under §103. Indeed, the proposed combination of these references and the discarding of many of their numerous elements and the selection and re-arrangement of other elements has been done only by utilizing the teachings of applicant's invention which use of hindsight is impermissible and explicitly prohibited in applying the non-obviousness test of §103.

Accordingly, for at least these reasons, amended claims 23, 25 and 28-31 define patentable subject matter and should be allowed.

Claims 32-36

Independent claim 32 further defines applicant's method as having the steps of closing the mold halves together to receive and compress in the second cavity two overlapping portions of the parison to form at least one cap having twice as many vapor barrier layers as the vapor barrier layer(s) of the container.

The proposed combination of Duhaime and Arnold does not disclose, suggest, teach or make obvious to skilled persons applicant's method as defined by amended claim 32 having this step of compressing two overlapping portions of the parison to form a cap having twice as many vapor barrier layers as the number of vapor barrier layer(s) of the blow molded container. Accordingly, independent claim 32 and each of claims 33-36 dependent thereon defines patentable subject matter under §103 for at least this additional reason as well as the reasons set forth above for which claim 23 defines patentable subject matter.

Entry of Amendment for Purposes of Appeal

It is respectfully requested that the foregoing amendments be entered at least for purposes of any necessary appeal in the event that after considering this response the elected claims are not allowed. These amendments will place the claims in a better form for appeal and to more sharply and clearly define the issues for appeal and hence should be entered at least for purpose of any necessary appeal.

Conclusion

As amended, all of the claims of this application are believed to define patentable subject matter under §103 over the applied references for at least the foregoing reasons. Accordingly, reconsideration and allowance of these claims as amended is respectfully requested.

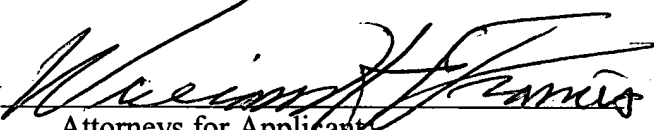
If, after considering this response, the Examiner is of the view that any of the claims are not in a condition for allowance, a telephone interview with applicant's undersigned attorney, William Francis, is requested so that immediate consideration can be given to any further amendments suggested by the Examiner or otherwise needed to place all of the claims in a condition for allowance. The Examiner is asked to schedule or initiate this interview by telephoning William Francis at (248) 689-3500 who normally can be reached Monday through Friday between 9:00 A.M. and 5:00 P.M.

Respectfully submitted

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